



DEPARTMENT OF THE AIR FORCE
USAF FREQUENCY MANAGEMENT CENTER (AFCC)
WASHINGTON, D.C. 20330-6340

ORIGINAL
FILE

REPLY TO
ATTN OF: CA

SUBJECT: Small LEO Federal Advisory Committee

RECEIVED

MAY 29 1992

18 MAY 1992

TO: Federal Communications Commission
Office of the Secretary
CC Docket 92-76
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

1. Reference is made to FCC Public Notice CC Docket 92-76, released 16 April 1992, Subject: FCC Asks for Comments Regarding the Establishment of an Advisory Committee to Negotiate Proposed Regulations

2. Paragraph 11 of the reference delineates the information required for application as a member of the Small LEO Federal Advisory Committee (FAC), if such a committee is formed. The following information is provided in response to the indicated items:

a. Name of the applicant and a description of the interests such a person will represent:

The USAF Frequency Management Agency will represent the United States Air Force (USAF).

b. Evidence that the applicant is authorized to represent the parties related to the interests the person proposes to represent:

Air Force Regulation 700-14 states that the USAF Frequency Management Agency "shall represent the USAF in committees, groups and organizations addressing frequency management to make sure Air Force policies and those of related organizations remain compatible."

c. A written comment that the applicant shall actively participate in good faith in the development of the rules under consideration:

This Agency, on behalf of the USAF, is willing to participate in good faith in the work of the Committee. USAF technical experts in specific subject areas will be required to also attend the meetings.

No. of Copies rec'd _____
List A B C D E

d. The reasons that the persons already specified in this Notice do not adequately represent the interests of the person submitting the application:

Only persons from the private sector are indicated in Paragraph 8 of the Docket. The US Air Force has major existing and planned systems in the frequency bands indicated in the Docket. Information on two USAF telecommunication systems are provided in the attachments as examples of such USAF use. Therefore, the USAF requires representation on the Committee.

3. The above information is provided with the understanding that allocation policy issues for the frequency bands contained in the referenced FCC Public Notice would have been clarified at the National level before the FAC commences its technical work.

4. My telephone numbers are (202) 475-1807 (Voice) and (202) 475-7634 (FAX).

Nelson V. Pollack

NELSON V. POLLACK, GM-15, DAF
Technical Director

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1. Block 5D-3 Description
2. CAP Mission

Defense Meteorological Satellite Program (DMSP)
Block 5D-3 Series Spacecraft

The primary mission of the Defense Meteorological Satellite Program (DMSP) is to collect and disseminate global visible and infrared (IR) cloud cover imagery, for daylight and night cloud-cover surveillance, in support of worldwide Department of Defense (DoD) operations and high-priority programs. The DMSP also collects and disseminates to DoD, and to other Government agencies, specialized meteorological, oceanographic, and solar-geophysical data. This is accomplished using a variety of spacecraft sensors. Mission requirements include providing real-time direct read out of local area weather data to receiving terminals, including tactical users, at locations throughout the world, and continuing the advancement of meteorological satellite (METSAT) technology to meet changing DoD requirements. The program currently maintains two satellites on-orbit at all times.

The mission to provide Real-time Data Smooth (RDS) meteorological information to tactical users requires the use of lightweight transportable user terminals with low profile, non-tracking antennas that allow for quick set-up and breakdown for troops on the move in a tactical environment. The 400.15-401 MHz frequency band is being used to support this METSAT mission. Nationally and internationally this band is allocated on a primary basis to the METSAT (space-to-earth) service.

METSAT RDS services in the 400.15-401 MHz band will be provided by two active BLOCK 5D-3 spacecraft in 833 km, 98.7 degree inclined orbits. Each satellite will transmit a different 355 kHz channel to omni-directional receiving earth terminals with 0 dBi antenna gain, 400 K noise temperature and receiver bandwidth on the order of 300 kHz. METSAT transmissions will consist of digital data at a symbol rate of approximately 178 kbps. METSAT space-to-earth signals will be transmitted at about 13 watts power through a low-gain spacecraft antenna with gain varying from about -2 dBi for points directly below the satellite to about +4 dBi at the limb of the earth. Forward error correction (FEC) is employed to achieve a system margin near 2 dB at low elevation angles. METSAT user receiving terminals are lightweight and transportable and will be deployed throughout the United States at most military installations, airports and test ranges. They will also be deployed in Host countries on a worldwide basis.

CIVIL AIR PATROL (CAP) MISSION

The Civil Air Patrol (CAP), under Congressional direction (*), provides Inland Search and Rescue; Disaster Assistance; Recovery and Reconstitution; Drug Interdiction and Eradication; and Civil Aviation Education and Training. They train and equip volunteers through a hierarchy of state and local echelons throughout our 50 states and territories. In FY-91, with 58,000 volunteers, CAP flew 258 Search and Rescue Missions, totaling 10,885 flying hours, and was credited by the Air Force Rescue Coordination Center (AFRCC) with 31 "Finds" and 24 "Saves". During the same period, CAP participated in 38 Disaster Relief Missions, totaling 180 flying hours, and was credited with 7 "Finds" and 5 "Saves".

RESOURCE USE

To support these vital missions, CAP requires the use of the 148.0 - 149.9 MHz spectrum for its fixed and mobile voice repeaters as well as fixed base stations, and vehicular mobile and hand held transceivers. In addition, CAP operates a burgeoning PACKET (digital) Radio Network in the same frequency band. The equipment links the units with the individual volunteers using corporate as well as their personal equipment to train and perform their CAP duties. CAP's radios, antennae, and auxiliary equipments supporting this VHF/FM network are valued in excess of \$10 million; are located at/around 410 permanent voice repeater sites, and 250 DIGIPEATER sites, with numerous mobile repeaters for temporary insertion into unpopulated areas; and include the following type equipments:

- General Electric MASTR II Repeaters
- Motorola MICOR Repeaters
- Variety of PACKET Radio DIGIPEATERS/Applications
- NEUTEC Mobile Transceivers
- Variety of Hand Held Transceivers

(*) AFR 46-4, Para 2a(1) and (2), and Para 2b; The National Search and Rescue Manual (Joint Pub 3-50), Para 234B5; Air Rescue Service OPLAN 9506, Inland Search and Rescue, Para 3g(5); Public Law 100-690, Section 7606, and Memorandums of Understanding between CAP and US Customs Service (USCS), Drug Enforcement Administration (DEA), and US Forest Service (USFS) to provide "aerial reconnaissance, airlift, and aerial communications support" for those agencies.